







How to change: BMW E46 convertible spark plugs – replacement guide



**VIDEO TUTORIAL** 

#### (i) Important!

This replacement procedure can be used for: BMW 3 (E46) 318 i, BMW 3 Compact (E46) 318 ti, BMW 3 Convertible (E46) 318 Ci, BMW 3 Coupe (E46) 318 Ci, BMW 3 Touring (E46) 318 i

The steps may slightly vary depending on the car design.

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#### REPLACEMENT: SPARK PLUGS – BMW E46 CONVERTIBLE. TOOLS YOU MIGHT NEED:



- Electronic spray
- High-temperature anti-seize lubricant
- Torx bit T20
- Spark plug socket # 16
- Ratchet wrench

- Torque wrench
- Telescoping magnet
- Crow bar
- Fender cover

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#### Replacement: spark plugs – BMW E46 convertible. Professionals recommend:

- The replacement procedure is the same for all spark plugs.
- Warning! Shut down the engine before starting any work BMW E46 convertible.

#### CARRY OUT REPLACEMENT IN THE FOLLOWING ORDER:

1



Open the hood.

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Use a fender protection cover to prevent damaging paintwork and plastic parts of the car.

3



Unscrew the fasteners of the cabin filter housing cover.

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4.1



Raise a little the cabin filter housing cover.

4.2



Remove the cabin filter.

### Replacement: spark plugs – BMW E46 convertible. AUTODOC experts recommend:

• To avoid damaging the cabin filter cover, do not remove it before removing the filtering element.

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Remove the rubber strip.

6



Remove the cabin filter housing cover.

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Disconnect the wiring harness from the cabin filter housing.

8



Unscrew the filter housing fastening bolts. Use Torx T20. Use a ratchet wrench.

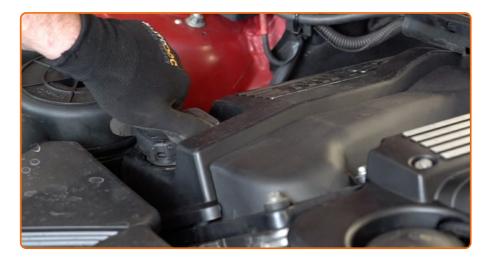
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Remove the cabin air filter housing.

10



Unscrew the oil filler plug.

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Remove the engine cover.

12



Tighten the oil filler cap.

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Unplug the connectors from the ignition coils.

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Take out the ignition coil from the spark plug well. Use a crowbar.

#### Replacement: spark plugs – BMW E46 convertible. Tip:

• Remember the sequence of steps for ignition coil demounting.

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Clean dirt, dust and debris from inside the spark plug wells.

16



Unscrew the spark plugs. Use the spark plug socket #16. Use a ratchet wrench.

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Take out the spark plugs. Use a telescoping magnet.

18



Apply a thin layer of a special high temperature anti-seize lubricant to the threads of the new spark plugs. Treat the surface of the terminals of the new spark plugs. Use high-temperature grease.

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Install the new spark plugs into their mounting seats.

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Screw new spark plugs and tighten them. Use the spark plug socket #16. Use a torque wrench. Tighten it to 27 nm torque.

# Replacement: spark plugs – BMW E46 convertible. Tip from AUTODOC experts:

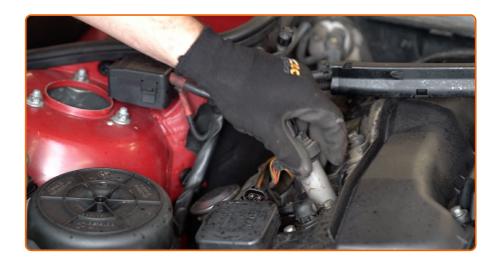
- Don't tighten the plugs with excessive force. Exceeding tightening torque can damage the thread connection.
- Be careful when working with a spark plug wrench. Its skewing can cause damage to the threaded connection.

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Treat the ignition coil connector with electronic spray. The spray will protect the electrical contacts from corrosion, oxidation, and will reduce the contact resistance.

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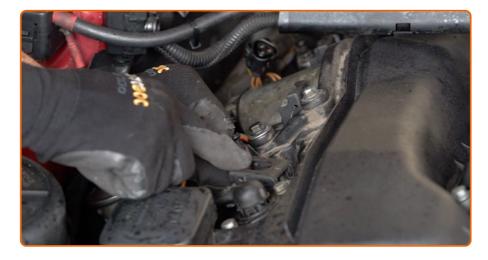
Install the ignition coils to the spark plug wells. Make sure you hear a click indicating that it is locked in place.

### Replacement: spark plugs – BMW E46 convertible. AUTODOC recommends:

Follow the installation sequence.

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Plug in the connectors of the ignition coils.

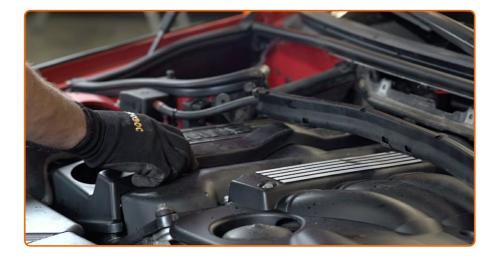
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Unscrew the oil filler plug.

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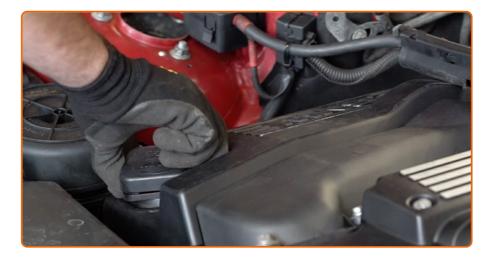


Install the engine cover and secure it.

## Replacement: spark plugs – BMW E46 convertible. Tip from AUTODOC experts:

- Make sure the engine cover is properly seated. It should not be displaced with respect to the guiding fasteners.
- Do not apply excessive force when installing the part. Otherwise you may damage the fasteners.

26



Tighten the oil filler cap.

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Install the cabin air filter housing.

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Screw in the cabin filter fasteners. Use Torx T20. Use a ratchet wrench.

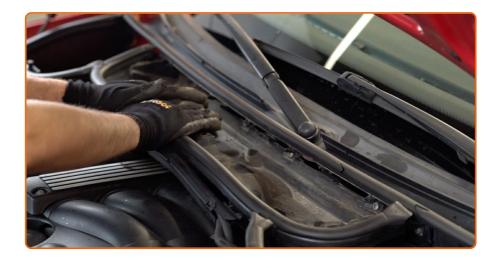
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Connect the wiring harness to the cabin filter housing.

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Install the rubber strip.

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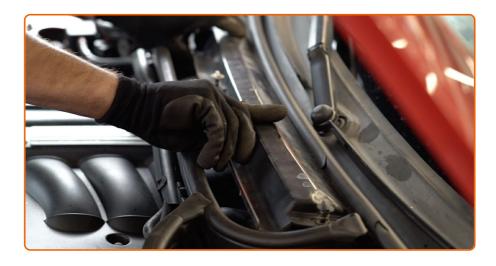


Insert the filter cartridge into the filter housing. Make sure that the filter edge fits tight to the housing.

### Replacement: spark plugs – BMW E46 convertible. Tip from AUTODOC:

- Follow the air flow direction arrow on the filter.
- Check out the correct location of the filter element. Do not skew.

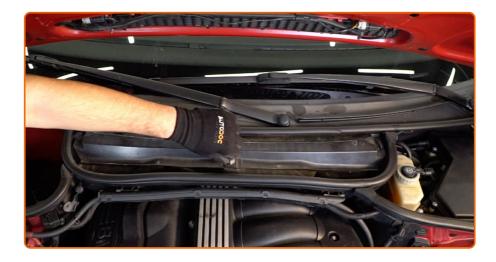
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Reinstall the cabin filter housing cover.

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Screw in the fasteners of the cabin filter housing cover.

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Remove the fender protection cover.

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Close the hood.

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## DID YOU FIND THESE INSTRUCTIONS HELPFUL?

YES

NO

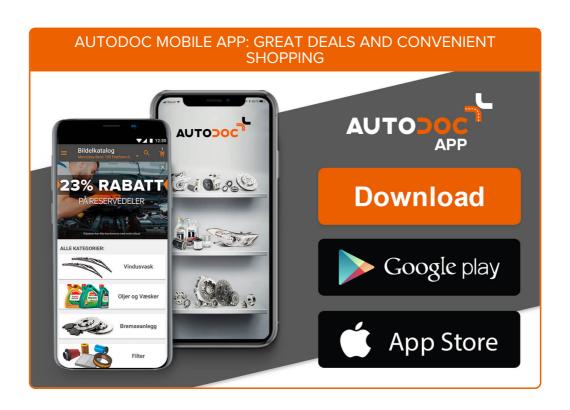


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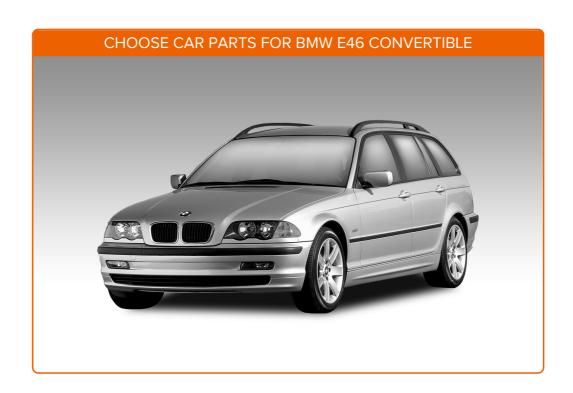






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